## U.S. EPA REGION VIII HAZARDOUS WASTE MANAGEMENT DIVISION RCRA COMPLIANCE INSPECTION REPORT



## PERFORMED AS PART OF A U.S. EPA REGION VIII MULTI-MEDIA INSPECTION

Facility Name:

S F Phosphates, Limited Company

was Chevron Chemical prior to April

1992, and was also known as F S

Industries for a short time

EPA I.D. No:

WYD151663325

Mailing address:

P.O. Box 1928

Rock Springs, WY 82902

Location:

525 South Highway 430

Rock Springs, WY

Facility Contact:

Darin L. Howe, Manager, Environmental

Affairs

Jim Williams, Vice President of

Operations

Telephone:

(307)382-1400

Date of Inspection:

September 21, 1993

Notification Status:

SOG

Type of Inspection:

Compliance Evaluation Inspection (CEI)

Participants:

Mr. James Kiefer, U.S. EPA Mr. Floyd Nichols, U.S. EPA

Mr. James Williams, SF Phosphates

Mr. Darin Howe. SF Phosphates Mr. Rhea Arsdall, SF Phosphates Mr. Jim Osborn, FS Phosphates

Ms. Peggy Crawmer, FS Phosphates

Weather:

Sunny and warm

Time In:

'8:00 AM

Time Out:

4:00 PM

#### INTRODUCTION

At approximately 8:30 AM on September 21, 1993, the inspectors arrived at the facility. The inspectors checked in with the receptionist, and then met with Mr. James Williams, Vice President of Operations; Mr. Darin Howe, Environmental Affairs Manager; Rhea T. Van Arsdall, Process Engineer; Jim Osborn, Area Coordinator for Operations; and Peggy Crawmer, Health and Safety Representative.

Mr. Kiefer presented his credentials to Mr. Williams and explained the purpose of the inspection. Mr. Kiefer explained that the inspection would include, a discussion of wastes generated by the facility, a tour of all waste management areas, including interviews with appropriate personnel, and a closing conference.

Mr. Kiefer said that the purpose of the Compliance Evaluation Inspection (CEI) was to determine compliance of the facility with the Resource Conservation and Recovery Act(RCRA). He said that the inspection would cover records from the last three years and all wastes generated at the facility. Mr. Kiefer filled out the top portion of the Notice of Inspection form and asked Mr. Howe to initial next to the check mark for entry by consent. Mr. Kiefer explained to the facility representatives that he would give them a copy of the Notice of Inspection at the end of the inspection.

The inspectors requested that Mr. Williams give a brief explanation of the facility and all points of waste generation. Mr. Williams had his staff explain the facility to the inspectors and showed some slides of various parts of the facility. The inspectors were then taken through all areas of the facility. After the inspection of the waste and process areas of the facility, Mr. Kiefer asked to review manifests and other required records and documents.

#### INSPECTION

Mr. Williams explained that on April 17, 1992 the facility was purchased from Chevron Chemical by FS Industries, Ltd.. J.R. Simplot owns 50% of the facility and the other 50% is owned by Farmland Industries. Soonafter, the name was changed to S F Phosphates, Limited Company. According to Mr. Williams, the Rock Springs facility produces phosphoric acid for animal feed and fertilizer. Phosphate rock is produced at a mine in Vernal, UT and delivered to this facility via a 96 mile pipeline. The final

products are superphosphoric acid (70%  $P_2O_5$ ) and monoammonium phosphate (50%  $P_2O_5$  and 10%  $N_2$ ). From the 80,000 tons of rock provided by the Vernal mine each year, 240,000 tons of  $P_2O_5$  are produced.

The production process involves burning sulfur to produce sulfur dioxide and sulfur trioxide, then reacting it with water to yield  $\rm H_2SO_4$ . The  $\rm H_2SO_4$  reacts with the phosphate rock to produce weak phosphoric acid and gypsum salt crystals. These crystals are filtered out and disposed of in an impoundment which has a 50-60 mil polyethylene liner. The facility stacks the phosogypsum in an effort to reduce the water area by 40%. This reduction in water area was requested by the State of Wyoming.

During the production process some silicon tetrafluoride gas is released. The facility is permitted for 2.6 lbs/hour by the state, but hopes they will be releasing no more than .7 lbs/hour of the silicon tetrafluoride since installing additional scrubbers. Sagebrush takes up fluoride and is then consumed by wildlife in the area of the facility. Mr. Williams said that they are working closely with the Wyoming Department of Wildlife on this issue.

Mr. Williams continued to explain that part of the phosphoric acid is concentrated to make superphosphoric acid and the rest is reacted with anhydrous ammonia to produce monoammonium phosphate. The anhydrous ammonia arrives by railcar from the Farmland facility in Louisiana. Water for the slurry comes from wells at the Vernal mine. The facility has Green River water rights, but is not currently using them because the water from the slurry plus water pumped from the trench down gradient of the impounment is used for the process. Mr. Kiefer then asked if the inspectors could look at the process and waste management areas of the facility.

Mr. Darin Howe, Mr. Rhea Van Arsdall, Mr. Jim Osborn, and Peggy Crawmer accompanied the inspectors through the facility. The inspection of the facility included the process areas (phosphoric acid plant, super green acid plant, MAP granulation plant, sulfuric acid plant), the tank farm, the 3 maintenance shops, the product storage and loading areas, and the storage yard and the quality control laboratory, and the phosphogypsum surface impoundment, and the five down gradient monitoring wells. The only areas that appeared to generate hazardous waste were the maintenance areas. There were three Safety Kleen sinks and two parts washers in use. Waste oil which is collected in a 1350

gallon above ground tank is sent for recycling. Painting at the facility is contracted out, so no paint waste is normally generated. Chevron Thinner 450, a mineral spirits solvent with a flash point of 102°F, is used to clean bearings. The maintenance areas also use a variety of spray cans of chemicals that include brake cleaners, carburetor cleaners, and electronic cleaners. The inspectors advised the facility representatives that some of these spray cans contained chlorinated organic solvents and that from a pollution prevention viewpoint they might want to evaluate other chemicals that are available. In the machine shop area, the facility had a newly installed can puncturing system mounted on a 55 - gallon drum. It was labelled as hazardous waste. the rubber coating shop, 111-trichloroethane is used in cleaning and applying adhesives to the rubber coating that is applied to pipes used in the facility. According to personnel working in the area, there is no waste.

After the walk through inspection of the facility, the inspectors reviewed records. Hazardous waste manifests, Safety Kleen records, facility training and emergency procedures records were reviewed. All manifests appeared to be properly completed with LDR notification forms. The quantities of waste manifested or managed by Safety Kleen appeared to fall within the limits for a small quantity generator. According to facility representatives, personnel that handle the hazardous waste have been trained, and Darin Howe showed the inspectors some of the training records for the last year. The facility has an Emergency Procedures Plan that discusses the emergency coordinator and who to call in case of emergencies, but the name and telephone number of the emergency coordinator was not posted by telephones in the working areas.

## CLOSING CONFERENCE/SUMMARY OF FINDINGS:

At the closing conference, Mr. Kiefer told the facility representatives that at the present time the facility was a small quantity generator of hazardous waste primarily because the Safety Kleen solvents that they used were of such a quantity and changed frequently enough that they generated more than 100 Kg of hazardous waste per month. Mr. Kiefer explained that by looking into pollution prevention and waste minimization opportunities and by using non-hazardous solvents and spray cans of chemicals, the facility could easily become a conditionally exempt small quantity generator.

#### SUMMARY OF FINDINGS:

- 1. The name and phone number of the facility emergency coordinator and alternate and other emergency information were not posted by telephones with the in work areas as required by 40 CFR 262.34(d)(5)(ii).
- 2. The inspectors suggested that the facility should implement a pollution prevention and waste minimization plan that would evaluate the use of Safety Kleen solvents and other spray cans of chemicals. The inspectors suggested that the facility might even be able to become a conditionally exempt small quantity generator of hazardous waste if the Safety Kleen solvent usage could be reduced or eliminated.

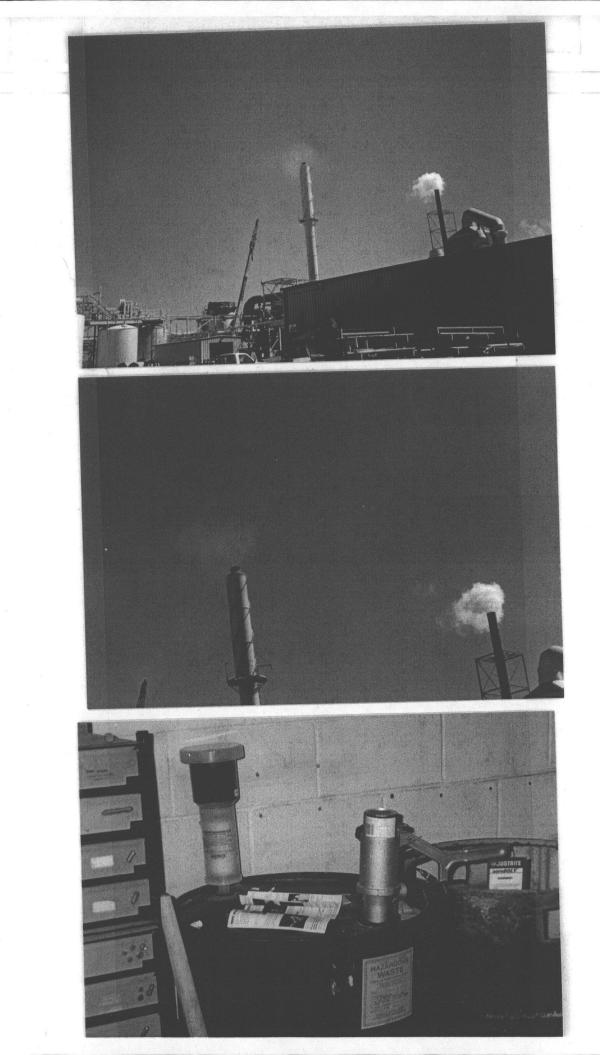
Prepared By:

Attachments:

Notice of Inspection Form

3 Photographs

FCD:December 13, 1993:\data\wp\multi\sfphosph.rpt



OFFICIAL PHO REGION	viidaarn Viii
U.S. ENVIRONMENTAL P	ROTECTION AGENCY
PROJECT/CASE NO: SF PH	**************************************
SUBJECT: EMISSIONS PA	
LOCATION:	31 HCK
am ford spaws	,
CITY ROCK SPRING COUNTY SWI	
	DY) (RAIN) (SNOW)
PHOTOGRAPHER (Sig.)	m. Kufu
	ILLING
CAMERA:	
rilm type:asa: Negative location:	
PROCESSED BY:	FILE #
PHOTO #:	OF .
EPA-R8-1335 9/85	
OFFICIAL	PHOTOGRAPH
REG U.S. ENVIRONMENTA	ON VIII
*************************	L PROTECTION AGENCY
PROJECT/CASE NO: S F	PHOSPHETES
SUBJECT: EMISSION	
LOCATION:	FROM STACK
CITY: ROCK SALME OUNTY: S	WEETWATE A STATE. WY
DATE: 9/21/93	TIME:
WEATHER: (SUN) (HAZE) (CL	
	DUDY) (RAIN) (SNOWA a
PHOTOGRAPHER (Sig.)	DUDY) (RAIN) (SNOW)
PHOTOGRAPHER (Sig.) WITNESS: CHERY & SHE	• ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
PHOTOGRAPHER (Sig.) WITNESS: CIVERY SIE CAMERA:	
PHOTOGRAPHER (Sig.) WITNESS:	
PHOTOGRAPHER (Sig.) WITNESS: S.H. CAMERA: ASA: FILM TYPE: ASA: NEGATIVE LOCATION:	nes M. Kufer
PHOTOGRAPHER (Sig.) WITNESS: S.E. CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY:	TIV
PHOTOGRAPHER (Sig.) WITNESS: S.H. CAMERA: ASA: FILM TYPE: ASA: NEGATIVE LOCATION:	T:1/
PHOTOGRAPHER (Sig.) WITNESS: S.A. CAMERA: ASA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #:	T:1/f:
PHOTOGRAPHER (Sig.) WITNESS: S.A. CAMERA: ASA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #:	T:1/
PHOTOGRAPHER (Sig.) WITNESS: S.A. CAMERA: ASA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #:	T:1/
PHOTOGRAPHER (Sig.) WITNESS: S.A. CAMERA: ASA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #:	T:1/f:
PHOTOGRAPHER (Sig.) WITNESS: CARRY SALE CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPA-RB-1335 9/85  OFFICIAL	T:1/f:
PHOTOGRAPHER (Sig.) WITNESS: CARRY SALE CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPA-RB-1335 9/85  OFFICIAL	T:1/f:
PHOTOGRAPHER (Sig.) WITNESS:	T:1/
PHOTOGRAPHER (Sig.) WITNESS: CVERY SE CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPA-RB-1335 9/85  OFFICIAL REI U.S. ENVIRONMENT	T:1/
PHOTOGRAPHER (Sig.) WITNESS: CVERY SECONDERS: CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPA-RB-1335 9/85  OFFICIAL REI U.S. ENVIRONMENT	T:1/f:
PHOTOGRAPHER (Sig.) WITNESS: CAMERA: CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPA-RB-1335 9/85  OFFICIAL REI U.S. ENVIRONMENT	T:1/f:
PHOTOGRAPHER (Sig.) WITNESS: CIVERY SIE CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPARB-1335 9/85  OFFICIAL REI U.S. ENVIRONMENT  PROJECT/CASE NO: SIE SUBJECT: CAN PUC LOCATION: SYSTEM	PHOTOGRAPH SAL PROTECTION AGENCY  PHOS PHATES TURING / DRAWING
PHOTOGRAPHER (Sig.) WITNESS: CHERY SHE CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPARB-1335 9/85  OFFICIAL REI U.S. ENVIRONMENT  PROJECT/CASE NO: SF SUBJECT: CAN Puc	PHOTOGRAPH SION VIII AL PROTECTION AGENCY  TURING / DRAINING  CHESTWATER STATE: WY
PHOTOGRAPHER (Sig.) WITNESS: CIRRY SIE CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPARB-1335 9/85  OFFICIAL REI U.S. ENVIRONMENT  PROJECT/CASE NO: SF F SUBJECT: CAN Puc LOCATION: SYSTEM  CITY: Rock Spence COUNTY: DATE: 1/21/9.3	PHOTOGRAPH SION VIII AL PROTECTION AGENCY  TURING / DRAINING  SWEETWATER STATE: WY  TIME:
PHOTOGRAPHER (Sig.) WITNESS: CVERY SE CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPA-RB-1335 9/85  OFFICIAL REI U.S. ENVIRONMENT  PROJECT/CASE NO: SF F SUBJECT: CAN Puc LOCATION: SYSTEM  CITY: Rock Spence COUNTY: DATE: 1/21/9.3	PHOTOGRAPH SION VIII AL PROTECTION AGENCY  TURING / DRAINING  CHESTWATER STATE: WY
PHOTOGRAPHER (Sig.) WITNESS: CARRY SAE CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPARB-1335 9/85  OFFICIAL REI U.S. ENVIRONMENT  PROJECT/CASE NO: SF SUBJECT: CAN Puc LOCATION: SYSTEM  CITY: Rock Sponce COUNTY: DATE: 9/21/9.3 WEATHER: (SUN) (HAZE) (PHOTOGRAPHER (Sig.)	PHOTOGRAPH SION VIII AL PROTECTION AGENCY  TURING / DRAINING  SWEETWATER STATE: WY  TIME:
PHOTOGRAPHER (Sig.) WITNESS: CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPARB-1335 9/85  OFFICIAL REI U.S. ENVIRONMENT  PROJECT/CASE NO: S F SUBJECT: CAN Puc LOCATION: SYSTEM  CITY: Rock SponceCounty: DATE: 9 / 21/9.3 WEATHER: (SUN) (HAZE) (PHOTOGRAPHER (Sig.) WITNESS: CFLER (HAZE)	PHOTOGRAPH SION VIII AL PROTECTION AGENCY  TURING / DRAINING  SWEETWATER STATE: WY  TIME:
PHOTOGRAPHER (Sig.) WITNESS: CARRY SAL CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPARB-1335 9/85  OFFICIAL REI U.S. ENVIRONMENT  PROJECT/CASE NO: SF I SUBJECT: CAN Pue LOCATION: SYSTEM  CITY: Reck Spence COUNTY: DATE: 1/21/9.3 WEATHER: (SUN) (HAZE) PHOTOGRAPHER (Sig.) WITNESS: CFI. PR	PHOTOGRAPH SION VIII AL PROTECTION AGENCY  TURING / DRAINING  CLOUDY) (RAIN) (SNOW)  SEFFLUENCE  TO THE SEFFLUENCE  TO THE SEFFLUENCE  TO THE SEFFLUENCE  SEFFLUENCE  TO THE SEFFLUENCE  TO THE SEFFLUENCE  SEFFLUENCE  TO THE
PHOTOGRAPHER (Sig.) WITNESS: CHERY SAL CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPA-RB-1335 9/85  OFFICIAL REI U.S. ENVIRONMENT  PROJECT/CASE NO: SF I SUBJECT: CAN Puce LOCATION: SYSTEM  CITY: Reck SpenceCounty: DATE: 1/21/9.3 WEATHER: (SUN) (HAZE) ( PHOTOGRAPHER (Sig.) WITNESS: CFI ER Y CAMERA: FILM TYPE: ASA:	PHOTOGRAPH SION VIII AL PROTECTION AGENCY  CLEINC  T:1/
PHOTOGRAPHER (Sig.) WITNESS: CHERY SAL CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPA-RB-1335 9/85  OFFICIAL REI U.S. ENVIRONMENT  PROJECT/CASE NO: SF I SUBJECT: CAN Puc LOCATION: SYSTEM  CITY: Rock Sponce COUNTY: DATE: 1/21/9.3 WEATHER: (SUN) (HAZE) ( PHOTOGRAPHER (Sig.) WITNESS: CFLER (H CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION:	PHOTOGRAPH SION VIII AL PROTECTION AGENCY  TURING / DRAINING  CLOUDY) (RAIN) (SNOW)  SEFFLUENCE  TO THE SEFFLUENCE  TO THE SEFFLUENCE  TO THE SEFFLUENCE  SEFFLUENCE  TO THE SEFFLUENCE  TO THE SEFFLUENCE  SEFFLUENCE  TO THE
PHOTOGRAPHER (Sig.) WITNESS: CARRY SAL CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPARB-1335 9/85  OFFICIAL REI U.S. ENVIRONMENT  PROJECT/CASE NO: SF E SUBJECT: CAN Puc LOCATION: SYSTEM  CITY: Reck Spence COUNTY: DATE: 9 / 21/9-3 WEATHER: (SUN) (HAZE) PHOTOGRAPHER (Sig.) WITNESS: CFLER Y CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY:	T:1/
PHOTOGRAPHER (Sig.) WITNESS: CARRY SAC CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION: PROCESSED BY: PHOTO #: EPARB-1335 9/85  OFFICIAL REI U.S. ENVIRONMENT  PROJECT/CASE NO: SF I SUBJECT: CAN Puc LOCATION: SYSTEM  CITY: Rock SponceCounty: DATE: 1/21/9.3 WEATHER: (SUN) (HAZE) ( PHOTOGRAPHER (Sig.) WITNESS: CFLER (H CAMERA: FILM TYPE: ASA: NEGATIVE LOCATION:	PHOTOGRAPH SION VIII AL PROTECTION AGENCY  CLEINC  T:1/

# U.S. ENVIRONMENTAL PROTECTION AGENCY (REGION VIII) 999 18th St. Suite 500, Denver, CO 80202-2413 NOTICE OF INSPECTION

Р	R	O	G	R	A	N	ı
---	---	---	---	---	---	---	---

T X 5			A = + 4D4	NDA) Dublic	04.500			
					_aw 94-580, as a	amenaea.		
Toxic Substances Control Act (TSCA) Public Law 94-469, as amended.  Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Public Law 92-516, as amended.								
Date	Inspector #	Daily Seq.	Hour SING A	MO Fac.	Facility name	EPA	I.D.# /n : ち /	663325
19/21/93	4541	1	OUT:4!%	en	SEPL		0101	663325 J. Co.
Fac. Func.	H541 Invest. Type	FATES Reason	n RCRA:	Gen.	1 7	cosperac	es, or	d. Co.
	RET		ROG	Transp. ( )		·····		
	CEL		Pac	TSD ()	Street			
Facility Repre	esentative(s)		Title ·	4	515	So Hwi	1430	
NARIN	HOWE	MANAGE	R, ENVIR	, AFFAIRS	P.0.	Box 17	89	
			,		City	100	State	7in
Phone # (367	) - (382-1519	)			Street  5 5 5  P.O.  City  Rock S  renced law, whi	Drw/G.S	wy	81902
December 4s			N	NH	11000	<i>pr</i> 110 GC	\\	
Heasen for	r I <b>nspection</b> : t	entry by Conse	ent: (N) —:	he above refe	renced law, whi	ich may rog	Warr	ant: ( )
	mples, docume	•		ne above rele	renced law, will	ich may requ	une me co	Silection
Othe	r (Specify)							
Viola	tions of above	referenced lav	v are suspec	cted from info	rmation or com	plaint. Yes	s ( ) No	( )
Complex Do		or Dhetes solls		riba balaw)			Madium	Data ta Lab
Samples, Do	cuments, and/o	THOUS COILE	ected (desc				Medium	Date to Lab
1. 3 nf	) trans	ha						
	90000	7 (35			1 12 12 12 12 12 12 12 12 12 12 12 12 12			
2.								
3.								
4.		•						
F								
5.								
6.		\$						
Samples rec	uested and red	ceived by facili	itv: ( ) Ye	es ( ) No				
If yes: ( )	Duplicate. (	) Split. ( )	Photos (To	be received	when processed	d.)		
This inspecti	on has reveale	d the following	probable v	uiolations of E	PA laws or reg	ulations. F	inding'	
Name of		a den	nenalma	y coorlin	itas na	Lastel	By I	elephones
10 anc and	prone i	<i>a d d d d d d d d d d</i>	T o	<i>†</i>	\$2 \\$2 \cdot		0	/
JAN-W-814	e allean							
r_					*			!
					nnel in the EPA			
8	mination of yo may reveal add		•	ith EPA regula	ations will be m	ade as a res	sult of this	review.
	<u> </u>			<u> </u>	<del></del>			
	nis Notice of In	spection	( Sig	nature of Lea	d Inspector	/ /		
is acknowled	ugea.		4	tames	M, Ki	Efer	SUBM RCRIS	17TED FORM
_			A S		tors (EPA/Con	tr/State)		
	, , ,	i		- ·		1		
Hon	ind. h	Loure	l —					
(Signature	of facility repre	sentative)			· · · · · · · · · · · · · · · · · · ·			
(C.g.iataro (	ao.iity Topio					<u>_</u>		





